Title (en)

A SYSTEM FOR DYNAMIC PHASE-LOAD DISTRIBUTION WHEN CHARGING ELECTRICAL VEHICLES

Title (de)

SYSTEM UND VERFAHREN ZUR DYNAMISCHEN PHASENLASTVERTEILUNG BEIM LADEN ELEKTRISCHER FAHRZEUGE

Title (fr)

SYSTÈME DE DISTRIBUTION DE CHARGE DE PHASE DYNAMIQUE LORS DE LA CHARGE DE VÉHICULES ÉLECTRIQUES

Publication

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Application

EP 22191138 A 20151222

Priority

- EP 22191138 A 20151222
- EP 15202022 A 20151222

Abstract (en)

The invention concerns a 3-phase charging assembly for optimal use of available electrical power when charging electrical vehicles, EV's. The charging assembly comprises a 3-phase distribution cable supplying power by means of subsidiary isolated conductors for each phase L₁ in, L₂ in, L₃ in and a neutral conductor N in, at least one electric vehicle supply equipment, EVSE, comprising internal circuitry with an input electrically connected to the subsidiary isolated conductors L₁ in, L₂ in, L₃ in of said 3-phase distribution cable, and an output L₁ out, L₂ out, L₃ out electrically connectible to at least one EV for providing power for charging. The EVSE further comprises a plurality of primary relays R5, R7, R9 each configured to connect or disconnect electrical power provided by the conductors for each phase L₁ in, L₂ in, L₃ in at the input to respective output L₁ out, L₂ out, L₃ out, where at least one overcurrent protector is connected in series with each primary relay R5, R7, R9; secondary relays R6, R8, RIO - R16 configured in a relay matrix for enabling routing of a 1-phase load at the output L₁ out to phases L₂ in, L₃ in at the input, and a control system comprising communication means, wherein the control system changes relay status by connecting or disconnecting each of said primary and secondary relays R5 - R16 and to transmit and receive relay status information to and from other EVSEs connected to the 3-phase distribution cable.

IPC 8 full level

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CPC (source: EP US)

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Citation (applicant)

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Citation (search report)

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DOCDB simple family (application)

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